

## Educational Rocketry

Physics, electronics, design challenges, and hands-on activities are integral parts of the SERI program.

Participation in SERI offers something for everyone; students can focus on their areas of expertise and get the satisfaction of completing an entire rocket program—from rocket kit to launch vehicle!



3, 2, 1, 0—Lift Off!



National Aeronautics and Space Administration  
Goddard Space Flight Center  
Wallops Flight Facility

NASA Wallops Flight Facility  
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## Small-scale Educational Rocket Initiative



National Aeronautics and Space Administration  
Goddard Space Flight Center  
Wallops Flight Facility



*Learning opportunities  
for High Schools and  
Colleges*

# Small-scale Educational Rocketry Initiative

The **Small-scale Educational Rocket Initiative (SERI)** combines hands-on activities with problem solving and creative design challenges. NASA provides a rocket kit and payload, the students and teachers build and integrate the system to a launch ready vehicle. The rocket and payload systems are retained by the school after program completion.



Rocket ready for launch.

## Learning Opportunities

Learning opportunities range from rocket physics to electronics. The SERI program incorporates the process, safety and success criteria of a real NASA mission

Students submit reports and give presentations to NASA engineers and managers.

Students experience the excitement of launching a high powered rocket while monitoring the data reception from their payload. Data is then analyzed and compared with projections created with commercially available or student created software.

## How to Participate

In 2004 NASA Wallops Flight Facility is conducting a pilot program with regional schools. When evaluation of the trial program is complete and results are incorporated, the SERI program announcement will be posted at

<http://www.wff.nasa.gov/seri/>

A High School or College interested in participating will be requested to submit a proposal outlining how rocketry will be used to enhance the existing curriculum and how the program will be sustained past the first year. Two schools will be selected annually.



Students from Pennsylvania State University preparing their rocket for launch.

## NASA Involvement

Web based learning opportunities, lectures and rocket launches are planned for each school's first year of participation. NASA employees are available by email to answer questions from teachers and students. Rocket launch events will take place on Wallops Island, and the schools are invited to send representatives, at the school's expense, to attend the launch. All launches will be broadcast over the internet for schools unable to send representatives to Wallops.



Mission Readiness Review



Tour of Wallops

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